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(12)

### **EUROPEAN PATENT APPLICATION**

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- (22) Date of filing: 12.04.1996

- (51) Int. CI.<sup>6</sup>: **G11B 20/00**, H04N 5/91, G11B 27/32, H04N 5/926, H04N 5/92, H04N 5/85, H04N 7/16, H04N 7/52, H04H 1/00, G11B 19/12, G11B 23/28
  // G11B7/00
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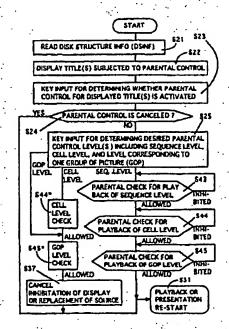
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- (30) Priority: 14.04.1995 JP 114005/95
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# (54) Information storage and information transmission media with parental control

(57) Parental information of a video program recorded on an optical disk is always checked (S43 to S45) in a disk player. Even if a jump of laser beam tracing of an optical head erroneously occurs due to shocks or vibrations, the content of parental information assigned to the destination of optical head jumping is checked, to thereby achieve an accurate parental control of selective restriction for the video whose reproduction or presentation is restricted by the parental information.





	OCUMENTS CONSIDERED TO BE RELEVAN	
Category	Citation of document with indication, where appropriate, of relevant process:	Relevant CLASSIFICATION OF TO APPLICATION (Int.CL6)
X	EP 0 635 835 A (SONY CORPORATION)  * column 13, line 15 - column 38, line 33	1.9-11, 13.16, 20, 22-29, 31-37, 79.95, 97,105 HO4N5/92 HO4N5/92 HO4N5/85 HO4N7/16 HO4N7/16
A X	WO 95 08231 A (SPYRUS, INC.)	5,12,14, H04H1/00 611B19/12 611B23/28 17-19, 21,30, 83,84, 88,91,98 1,5,20, 91,95,
<b>A</b>	* the whole document *	9-19, TECHNICAL FILLDS; SEARCHED (INCLA 40.44, G11B H04N 79.83, H04H 84.88,98 H04K G06F
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tegory	OCUMENTS CONSIDERED TO BE RELEVAN'  Citation of document with indication, where appropriate,  of relevant passages	Relevant to claim	CLASSIFICATION OF THAPPIJICATION (Ind.CL6)	
	WO 95 03655 A (OAKLEIGH SYSTEMS, INC.)	1,5,20, 91,95, 105,108	:	
	* page 6, line 18 - line 24 * * page 7, line 33 - page 8, line 27 * * page 11, line 12 - line 30 *			
	* page 11, line 12 - line 30 * * page 12, line 7 - page 13, line 15; figures 3,5 *	·		
		9-19. 21-37. 40,44,		
• •		48-76, 79.83, 84.88.98		
	PATENT ABSTRACTS OF JAPAN vol. 18, no. 365 (P-1767), 8 July 1994	1,5,20, 91,95,	. :	
	& JP 06 095871 A (FUJITSU, LTD.), 8 April 1994, * abstract *	105,108		
	P.A:&US 5440631 A	9-19, 21-37,	TECHNICAL FIELDS SEARCHED (INCCL6)	
		40,44, 48-76, 79,83,		
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		!		1,40,79		
	PATENT ABSTRACTS	UF JAPAN D 2251 10 N	ovember 1983	1,40,75		*
, ,	vol. 7, no. 253 (	Y-233), TO R	1 K K 1 15			:
: 1	& JP 58 137138 A	(2MUID DEUK	1 4.4.11 13			
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X	EP 0 406 021 A (S	SHARP K.K.)		1,79,91,	1	
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	ED 0 577 043 A /	N N TUCHIDAY		1,2,4-6	.]	
P,X	EP 0 677 842 A (	K.K. IOSHIDA)	• :	8-38.	1	
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P,X EP 0 668 695 A (VI LIMITED)  * the whole docume P,A  * the whole docume P,A	CTOR COMPANY OF JAPAN.	5-7.12. 14,15. 21,24. 30.33. 38.39 1-3. 9-11.13. 16-20, 22.23. 25-29. 31,32,	
P, X WO 95 12275 A (TIMED)  * the whole docume P, A  P, X WO 95 12209 A (TIMED)  * the whole docume P, A  * the whole docume P, A  The present search report has		14,15, 21,24, 30,33, 38,39 1-3, 9-11,13, 16-20, 22,23, 25-29,	
P.A  P.X WO 95 12275 A (TIME CO., L.P.)  * the whole docume P.A  P.X CO., L.P.)  * the whole docume P.A  * the whole docume P.A	i <b>t *</b>	21,24, 30,33, 38,39 1-3, 9-11,13, 16-20, 22,23, 25-29,	
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the whole docume  X W0 95 12200 A (TIM CO., L.P.)  * the whole docume  A		98-107	
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Application Number

EP 96 10 5817

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EP 0 450 841 A (GTE LAS			•
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### **EUROPEAN SEARCH REPORT**

ategory	Citation of document with indication, where appropriate, of relevant passages	Rejevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL6)	
	EP 0 389 689 A (PHILIPS AND DU PONT OPTICAL DEUTSCHLAND GMBH.)	1,5, 9-37,40, 44, 48-76, 95,98,		
: # : X	* the whole document *		:	
<b>A</b> 2 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	EP 0 644 692 A (K.K.TOSHIBA)  * the whole document *	1,5, 9-37,79, 83,84, 88,91, 95,105	,	
<b>A</b>	EP 0 593 305 A (MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.)	1,5, 9-37,79, 83,84, 88,91, 95,98,	TECHNICAL FIELDS	
:	* the whole document *		SEARCHED (Int.Cl.6)	
<b>A</b>	PATENT ABSTRACTS OF JAPAN vol. 18, no. 574 (P-1821), 2 November 1994 & JP 06 208760 A (TOSHIBA CORP.), 26 July 1994,	1,5, 9-37,40, 44, 48-76, 95,98,		
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Application Number

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alegory	Citation of document with Indication, where of relevant passages	appropriate,	Reievant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL4)
-	EP 0 424 903 A (NEC CORPORAT)	9 4 4 7 8	.5, -37,40, 4, 8-76, 9,83, 4,88, 1,95,	
	* the whole document *		8,105	
<b>,</b> A	EP 0 651 391 A (K.K.TOSHIBA)  * the whole document *	94	.5, -37,40, 4, 8-76, 5,98, 05	
, A	EP 0 675 493 A (K.K.TOSHIBA)	,	,2,4-6,	:
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### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions, namely:

1. Claims 1-39,79-108:

Recording medium and recording and reproducing apparatus.

2. Claims 40-78

System for broadcasting or communicating Information.

EPO Form Supplementary Sheet B (1996)

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